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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,017	12/14/2004	Takchiro Kata	122056	1938
25944	7590	09/20/2006		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320				
EXAMINER				
OJINI, EZIAMARA ANTHONY				
ART UNIT		PAPER NUMBER		
3723				

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/518,017	KATA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Anthony Ojini	3723	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-28 is/are pending in the application.
- 4a) Of the above claim(s) 15-17, 19-21 and 26-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-14, 18 and 22-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Applicant's cancellation of **claims 1-11** filed 12/14/04 and election with traverse of **Group I, Species A**, claims 12-18, 22-28 in the reply filed on 07/13/06 is acknowledged. Applicant stated that claims 12-14, 18 and 22-25 read on the elected species. However, claims 15-17, 26-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7/13/06.

The traversal is on the ground(s) that "the subject matter of all claims and species is sufficiently related that a through search for the subject matter of any one Group of claims and species would encompass a search for the subject matter of the remaining claims and species. Thus it is respectfully submitted that the search and examination of the entire application could be made without serious burden". This is not found persuasive because the laminated mold of **Group II** is not required to be made by the method as claimed in **Group I**, as demonstrated by the claiming of two distinct species of method of manufacturing the laminated mold (specifically, either laminating thin sheets followed by removing excess portions by a shot blast, or tapering the thin sheets before laminating into a laminated mold).

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12,14,18, 23, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ladouce (5,798,076) in view of Espie et al. (5,382,402).

**With respect to claim 12**, Ladouce discloses a manufacturing method of a laminated mold comprising a laminate being formed by laminating a plurality of thin sheets (20) in a widthwise direction or in a peripheral direction of a tire comprising the steps of, laminating the thin sheets under the condition that excess portions of respective thin sheets on the side of a tire stepping face exceeding a profile of a tire crown portion are left, and after laminating the thin sheets removing the excess portions by means of machining (see col. 2, lines 39-67 & fig. 2).

**Ladouce** fails to disclose step of removing excess portions by means of a shot blast. Espie et al. disclose method of molding a tire and step of removing excess portions by means of a shot blast (see col. 3, lines 34-50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to perform manufacturing method of a laminated mold sheets of Ladouce by removing excess portions by means of a shot blast in view of Espie et al. so as to obtain the exact shape which corresponds precisely to the contour of the tire.

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**With respect to claim 14**, Ladouce discloses characterized in that, after masking boundary portions of respective thin sheets, removal of the excess portions is performed by means of machining.

**Ladouce** fails to disclose step of removing excess portions by means of blasting.

**Espie et al.** disclose method of molding a tire and step of removing excess portions by means of blasting (see col. 3, lines 34-50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to perform manufacturing method of a laminated mold sheets of Ladouce by removing excess portions by means of a shot blast in view of Espie et al. so as to obtain the exact shape which corresponds precisely to the contour of the tire.

**With respect to claims 18, 23, 25**, Ladouce discloses steps of, providing bumps on lamination surfaces of respective thin sheet in a thickness wise thereof so that the thin sheets are caused to mutually abut in a lamination wise direction through the bumps so as to fix spacing between the thin sheets (see col. 2, lines 46-51).

Claims 13, 22, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ladouce in view of Espie et al. as applied to claim 12 above, and further in view of Wood et al. (5,512,006).

**With respect to claim 13**, Ladouce fails to disclose aluminum powder is used as the material to be injected.

**Wood et al.** disclose an aluminum shot (a form of aluminum powder) in shot blasting.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to perform manufacturing method of a laminated mold sheets of

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Ladouce by using an aluminum shot (a form of aluminum powder) in shot blasting in view of Wood et al. so as to obtain the exact shape which corresponds precisely to the contour of the tire.

**With respect to claim 22**, please refer to claim 14 above.

**With respect to claim 24**, please refer to claim 18 above.

### ***Conclusion***

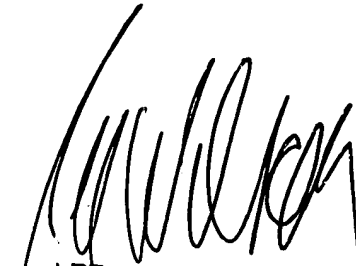
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Goodfellow discloses shot-blasting in molding of tire.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Ojini whose telephone number is 571 272 4492. The examiner can normally be reached on 7 to 4 Tuesday-Friday with every other Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571 272 4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LEE D. WILSON  
PRIMARY EXAMINER

AO  
9/15/06